Arizona Education Learning and Accountability System



Presented to:

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Requested Updates

- Clean Data initiative
 - Single source of truth/Student Information System rebuild
- AELAS Funding History

Electronic Transcripts



Clean Data is Job One

- The complex systems we all want (SLDS dashboards, school finance, student information system, teacher evaluation, etc.) must be able to retrieve a wide range of data from a single, **reliable source** in order to be dependable.
- If the clean data effort stalls, everything stalls

Clean data is the foundation upon which **every** objective surrounding modernizing our student data rests



We do NOT have clean data today

"The real tragedy [of SAIS] is that we have four highly-capable, technically-proficient individuals on the payroll just to make SAIS work. I have to wonder what wonderful, amazing, creative things these four individuals could do to forward the mission of educating children if they didn't have to spend all their time fixing SAIS." -Matt Federoff, Chief Information Officer, Vail School District

"This wonderful state cannot begin to address the many needs of our students without appropriate data and this can only come from a significant investment in technology. It is a contradiction to expect schools to use data to drive instruction if ADE cannot do the same thing." – Ron Neil, Superintendent, Sequoia School

"Communication between ADE program areas, LEAs and executive team was nonexistent. Parallel systems were built to combat the lack of trust in IT staff, costing the agency significant productivity and resources." –WestEd 2011 report



Defining the Problem: 150+ Separate Data Applications

- Many used by a small number of employees
- Few know how each application works
- Data only accessible to those who are in the know
- Temporary systems were built with little planning
 - Created to comply with new requirements
 - Never integrated or sunset when no longer useful

This inefficiency costs ADE **568,000** man hours each year to maintain



Defining the Problem: ADE's Bad Data Costs LEAs

- LEAs must provide data to each division of ADE that requires it
 - ADE does not track data has already been provided
 - This redundancy costs LEAs tens of thousands of hours every year
- Student records must be transferred manually between schools
 - ADE's data is not timely or reliable
 - Costing up to 3-5 weeks of productive instructional time

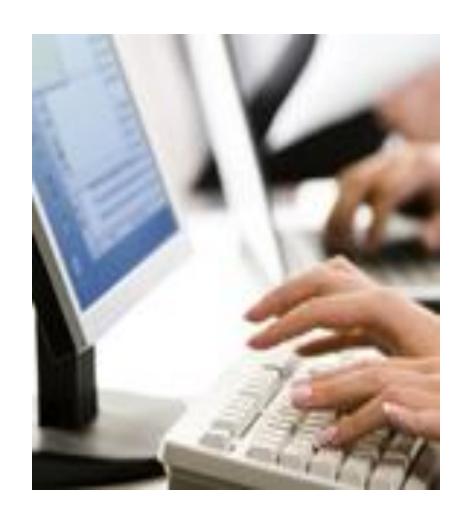
Arizona schools spend \$12.5M annually to process and correct ADE data errors



Real World Example

- School districts must provide
 100 day enrollment data to SAIS via the Common Logon
- Career and Tech Ed programs must provide 100 day enrollment data to ADE CTE
 - There is a numerical code required to be submitted along with that data
 - Therefore the 100 day count in SAIS can't be used for this submission. It must be re-created

This situation (or some version) occurs in nearly every department within ADE



Comparing Apples to Apples

- Common Education Data Standards (CEDS) is a common set of definitions that everyone follows when entering data
 - For example a person's first name is always stored in a field called FirstName, and is 35 characters max
 - Data Governance Commission adopted standard for all data stored at ADE
 - Planned completion FY2015
- Internal Data Governance/Data Officer
 - A formal process within ADE to get a handle on data use and requests within the agency
 - Individual program areas will not be permitted to request data unless it has been vetted through internal data governance



SAIS Must Be Replaced

Catastrophic failure likely within 2 years

- SAIS Replacement/Operational Data Store (ODS)
 - ODS is the holy grail of clean data
 - Centralized data source for ADE used by all program areas to eliminate redundant collection

Approximately \$30M included in current AELAS plan

- SAIS replacement/financial systems and SLDS dashboards funded as a stand-alone effort
 - Diminished local savings as LEAs continue to procure their own redundant tools

Approximately \$52M over 5 years due to lost efficiencies

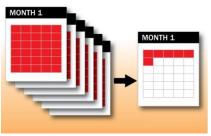




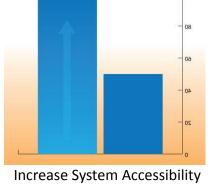
SAIS stabilization project accomplishments

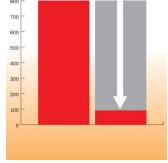
\$1.7M in FY11

- Hardware replacement
- Nearly 1,000 bug fixes
- Available 99.99%
- 100% calls answered within
 45 seconds
- SAIS available on time FY12 first time since 2003
- Processing time reduced 200%
- First time "on time" 40-day and 100-day aggregation
- Integrity run calendar posted on IT Bulletin with deadlines
- Documents rewritten to consolidate information



On Time Fiscal Year Rollover

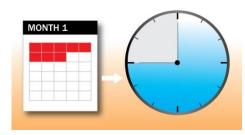




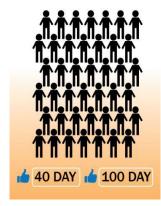
Reduce Customer Issues



Improved SAIS Launch Time



Improved Customer Service



Student Count Completed On Time, First Time



AELAS funding highlights \$6.6M in FY12

- Enterprise Architecture (\$650K)
 - Reduce 150+ systems
 - Lower cost and increase data quality
 - Single Source of truth for LEAs
- SAIS functional user requirements (\$500K)
 - Provide software vendors blueprint for new system
 - Stabilization of legacy school finance systems
 - Law and rule implementation transparency
 - Security
- Financial Management (\$686K)
 - Removing manual financial processes
 - Consolidating 70+ financial systems
 - Lower cost and increase reliability/sustainability

- SAIS reengineering (\$1.5M)
 - Identified all applications, databases, tables and stored procedures
 - Law and rule implementation transparency
 - Accountability
- AELAS business case (\$876K)
 - Market research and product demos
 - Professional development course management
 - Video bank for teachers and students
 - Lesson plans to support AZ Common Core
- AZ SLDS Dashboards (\$417K)
 - Making data in warehouse visible to public
 - Transparency of ADE data for stakeholders
 - Test ADE's ability to deliver stakeholder dashboards



AELAS funding highlights \$6.2M in FY13

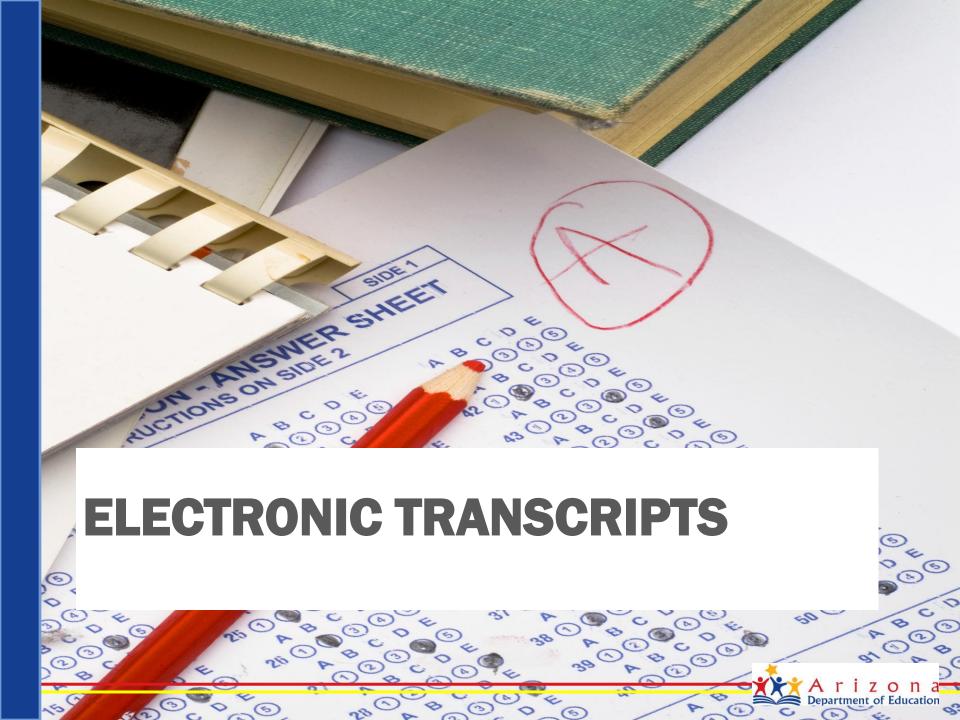
- SAIS Replacement (\$950K)
 - Automating and eliminating 6 redundant, manual payment processes
 - Gather requirements for an opt-in statewide SIS
 - Implement development processes/standards to avoid repeating SAIS "mess"
- IIS (\$550K)
 - Analyze 200 Requirements across 3 or more systems to create and evaluate RFP
 - Conducted focus groups to identify statewide system needs
- ADE System Replacement (\$1.45M)
 - Began implementation of CEDS
 - Deployed new, secure data access tool as mandated by DGC
 - Beginning implement the new secure access with SLDS pilot sites
 - Implementing recommendations of independent data quality consultant



Grant Funding Through FY2015

- Race to the Top (\$2.5M in FY12-15)
 - 493 certified 40th-day and 322 100-th day STC files uploaded
 - 95% of state's student population
 - 561 LEAs mapped to Arizona Course Catalogue
- US Department of Ed SLDS (\$4.9M in FY13-15)
 - 9 pilots underway (District and Charter pilot sites)
 - Using STC data
 - Demo site created





Electronic Transcripts

- Pilot project started at specific request of Postsecondary partners
 - Vail School District, University of Arizona and Pima County Community College
- Secure data transfer that uses Student-Teacher-Course Connection data

 Transcript data can be viewed in whatever format is appropriate at the sending and receiving institutions



Electronic Transcripts

- How will it work?
 - Standalone application between Vail, UA, and PCCCD
 - Vail sends student transcript data securely directly to the admissions office at the appropriate school
 - Admissions accepts the transcript data stored directly in the college or university database
- When will it work?
 - This proof of concept project is just getting started and affects only the three participants
 - Funding will be needed to scale it
 - Included in ADE's AELAS plan



What Will We Learn?

1. The format the data should be in for sharing (data standard)

2. The best method to send and receive the data (means to exchange)

3. Which users will be able to view, send, and receive transcript data (permissions)



Questions?



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